

PROFESSIONAL
DIGITAL SOUND PROCESSORS



User's Manual



DFP-110 Feedback Eliminator

138mm
5.4"

DIGITAL

IMPORTANT SAFETY INSTRUCTIONS



Note: in order to ensure safety, please read these instructions carefully

All safety and operating instructions should be read before the product is operated.



Attention: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture!

1 Ventilation

Do not block any ventilation openings.



2 Cleaning

Clean only with dry cloth.



3 Heat sources

Do not install near any heat sources such as radiators, stoves, or other apparatus that produce heat.



4 Power cord protection

Protect the power cord from being walked on or pinched particularly at plugs.



5 Overload

Power plug should not overload.



6 Objects or liquid entry inside the unit

Be careful that no objects fall or liquid is spilled inside the unit through ventilation openings.



7 Humidity

The unit should be far away from water.



8 Maintenance

Refer all servicing to qualified service personnel. To prevent the risk of shock, do not attempt to service this equipment yourself because opening or removing covers may expose you to dangerous voltage or other hazards.



DFP-110

Feedback Eliminator

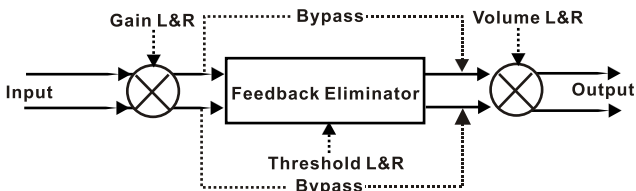


Controls

- ◆ Key HPF/UPF
 - ◆ Key MPF/RPF
 - ◆ Key Mono/Stereo
 - ◆ Led Clip
 - ◆ Led HPF/UPF ON:
 - ◆ Led MPF/RPF ON:
 - ◆ Enc
 - ◆ Pot Input Level
 - ◆ Key Process
 - ◆ Pot Output Level
- Freeze notch filters
 - Antifeedback Mode (notch attenuation fixed/variable)
 - Select mono stereo
 - Process overflow
 - Notch freeze (12 locked notches); OFF: free notches
 - Notch attenuation variable; OFF: fixed
 - 15 Sensibility L&R values and 1 position reset L&R notch filters
 - Input gain Left, Right
 - Bypass L+R
 - Output volume Left, Right

Parameters

- ◆ Inputs: Balanced 2 TRS/2 XLR
- ◆ Outputs: Balanced 2 TRS/2 XLR
- ◆ Input Max Level: 9 dBu
- ◆ Output Max Level: 9 dBu
- ◆ THD+N: <0.01% @ -6 dBFS (Bypass)
- ◆ S/N Ratio: >90 dBA (Bypass)
- ◆ Frequency Response: 20Hz-20kHz +/- 0.5dB
- ◆ A/D and D/A Resolution: 24 bit
- ◆ Process Resolution: 24x48bit
- ◆ Processes: Feedback Eliminator
- ◆ Phantom Power: +48V(with SW)
- ◆ Gain Select: Line/mic
- ◆ Output Level Indicator



Process Description

The system is based on the analysis of the frequencies contained into the incoming signal and removes the detected feedback up to 12 hi-precision notch filters per channel. Initial setup is not required. 15 preset sensitivities are available, allowing to reduce or increase the sensitivity of the unit to the feedback. The notch filter setup is memorized in order to be restored when the device is after a unit's power off/on. The device has the possibility to be set in terms of sensitivity through the encoder, which passing from the position 1 to the position 15 modifies, decreasing it, the sensitivity of the system lowering the reactivity of it to the feedback detection: the max sensitivity is got with the position 1 of the encoder, and the min sensitivity, with the position 15. An analog bypass control is available.

PROCESS STOP

The position 16 of the encoder resets all notch filters of the system and stops the feedback detection. Reset is operated ONLY in position 16 of the encoder.

PROCESS RUN

The positions 1-15 of the encoder enable the feedback detection. Working modes are:

◆HPF/UPF (Hold Parametric Filter/ Update Parametric Filter)

◆MPF/RPF (Maintain Parametric Filter/ Release Parametric Filter)

HPF/UPF(FREEZE MODE)

◆When **HPF/UPF** is ON (Led **HPF/UPF** ON) the system, after inserting the 12th notch (both channels) stops detection and freezes setup. MODE ATT setting has no influence.

◆When **HPF/UPF** is OFF (Led **HPF/UPF** OFF) the system, after inserting the 12th notch (both channels) continues Larsen detection and if necessary resets and reuses already used notches. MODE ATT setting is ENABLED.

MPF/RPF (MODE ATT)

◆When **MPF/RPF** is ON (Led **MPF/RPF** ON) the system gradually attenuates active notches if their action is no longer necessary, completely removing them after some time. New feedbacks will cause the notches to be enabled again.

◆When **MPF/RPF** is OFF (Led **MPF/RPF** OFF) notch attenuation is fixed.

Mono/Stereo Switch

Through this switch the user selects a feedback detection on the left channel only (MONO) or a feedback detection on both channel (STEREO)

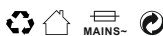
For an optimal signal-to-noise ratio and feedback detection, it is advised to operate the device in the range of -6dBV input signal.

China Office:

4/5Floor, Building B , No.885 , Shenzhou
Road, Science City, Guangzhou, China

Tel: +86(20)62845258/59/60

Fax: +86(20)62845256



[Http:www.marani.com.cn](http://www.marani.com.cn)